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(54) **NON-TRANSITORY COMPUTER-READABLE MEDIUM STORING PROGRAM AND COMMUNICATION DEVICE**

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(51) **Int. Cl.**

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H04N 7/15	(2006.01)
H04L 29/06	(2006.01)
H04M 3/56	(2006.01)
H04L 12/18	(2006.01)

(52) **U.S. Cl.**

CPC ***H04N 7/15*** (2013.01); ***H04L 12/1818*** (2013.01); ***H04L 65/1069*** (2013.01); ***H04L 65/403*** (2013.01); ***H04M 3/56*** (2013.01); *H04M 2203/5009* (2013.01)

(58) **Field of Classification Search**

CPC H04L 65/403; H04L 12/1818; H04M 2203/5009
USPC 348/14.08; 370/260; 709/204
See application file for complete search history.

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(57) **ABSTRACT**

A non-transitory computer-readable medium stores computer-readable instructions that, when executed by a processor of a communication device, instruct the processor to perform processes that includes performing a first receiving that receives a start request from a partner communication device, the start request including identification information and first user information and requesting that a remote conference be started, acquiring, based on the identification information, second user information stored in a storage portion, performing a first determining that determines whether the first user information and the second user information differ from one another, performing a first outputting that outputs a first command in response to determining that the first user information and the second user information differ from one another, and performing a second outputting that outputs a second command in response to determining that the first user information and the second user information do not differ from one another.

10 Claims, 7 Drawing Sheets

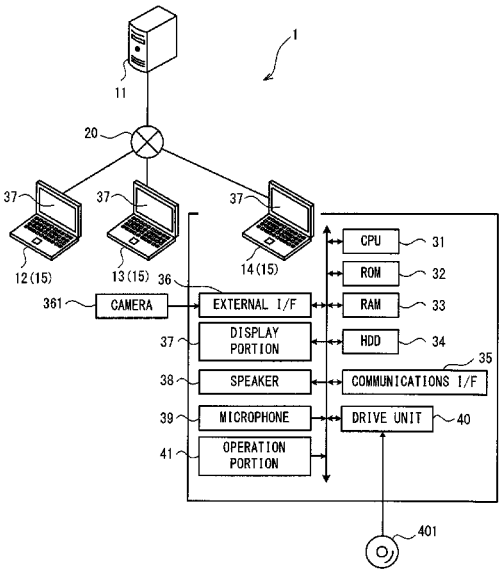


FIG. 1

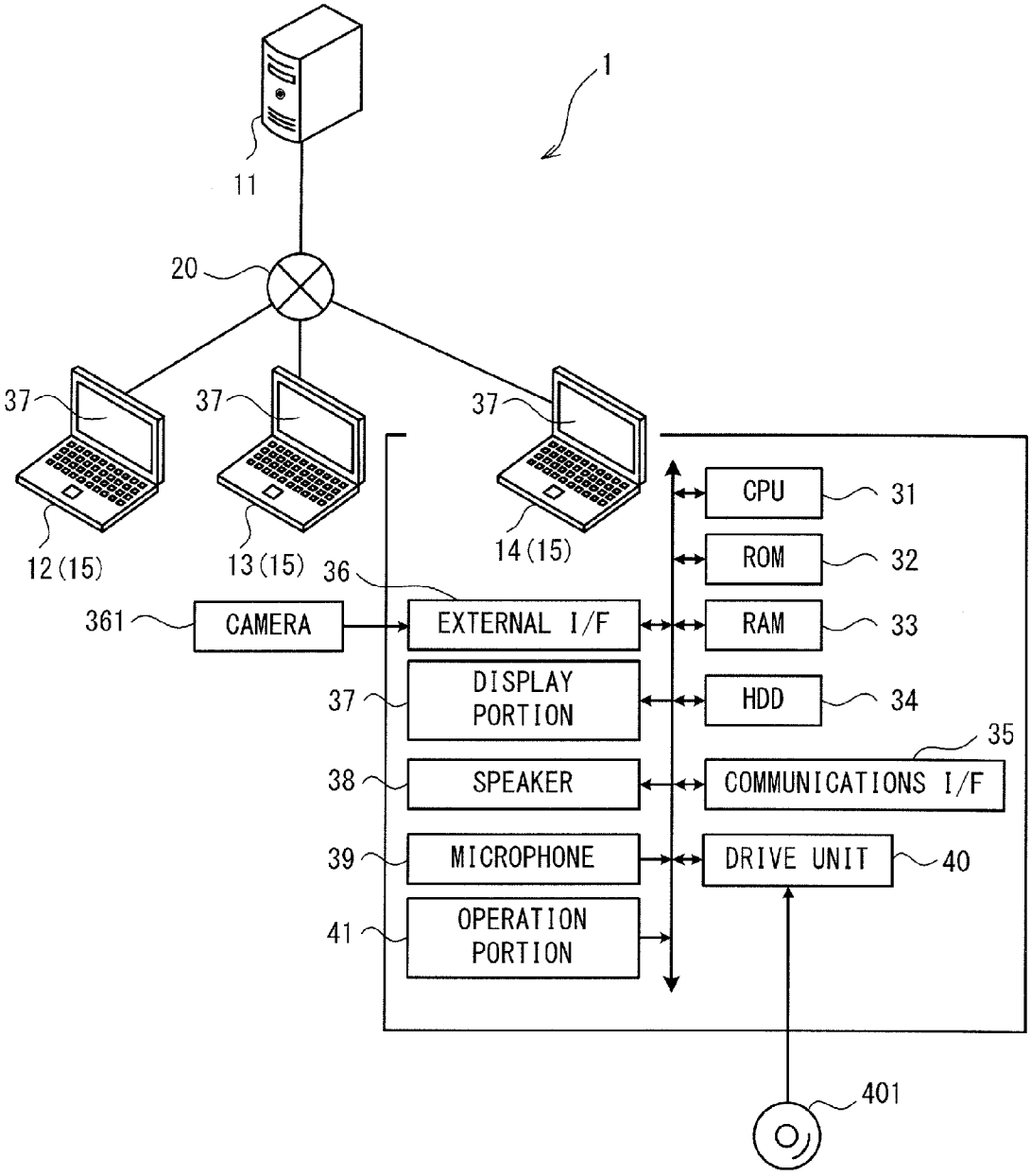

1
11
20
37
37
37
12(15)
13(15)
14(15)
36
361
CAMERA
EXTERNAL I/F
37
DISPLAY PORTION
38
SPEAKER
39
MICROPHONE
41
OPERATION PORTION
CPU
31
ROM
32
RAM
33
HDD
34
35
COMMUNICATIONS I/F
DRIVE UNIT
40
401

FIG. 2

341

USER ID	NICKNAME	SELF-INTRODUCTION	USER'S DEPARTMENT	USER IMAGE	UPDATE DATE AND TIME	NUMBER OF CONFERENCES
1	TARO	xxxxxxxxxx	yyyyy	taro.jpg	2012/6/1 1:23:45	10
2	HANAKO	yyyyyyyyyy	zzzzz	hanako.jpg	2012/6/2 2:34:56	5
3	ICHIRO	zzzzzzzzzz	xxxxx	ichiro.jpg	2012/6/1 1:23:45	1

FIG. 3

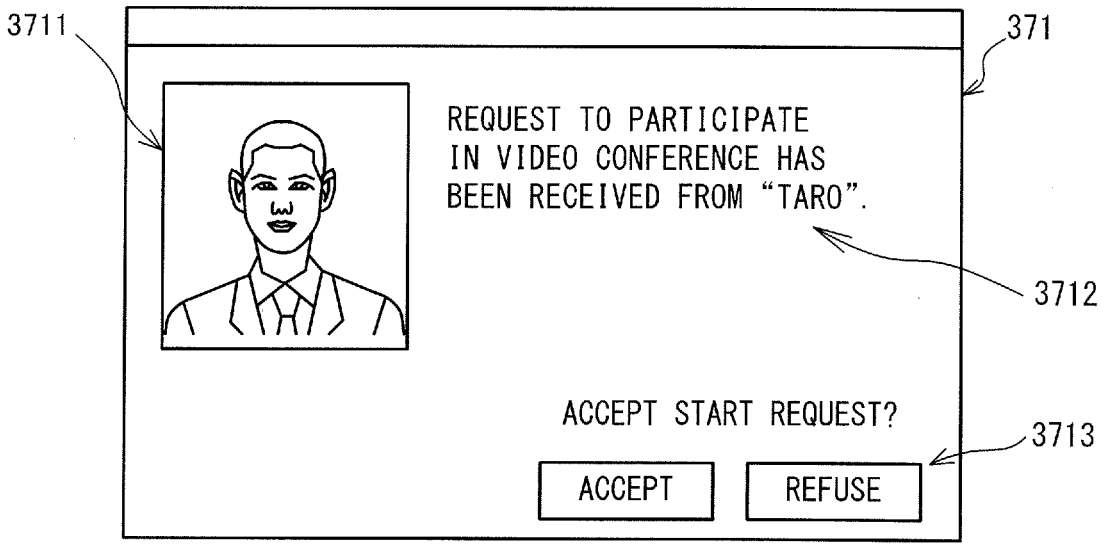

3711
371
REQUEST TO PARTICIPATE
IN VIDEO CONFERENCE HAS
BEEN RECEIVED FROM "TARO".
3712
ACCEPT START REQUEST?
3713
ACCEPT
REFUSE

FIG. 4

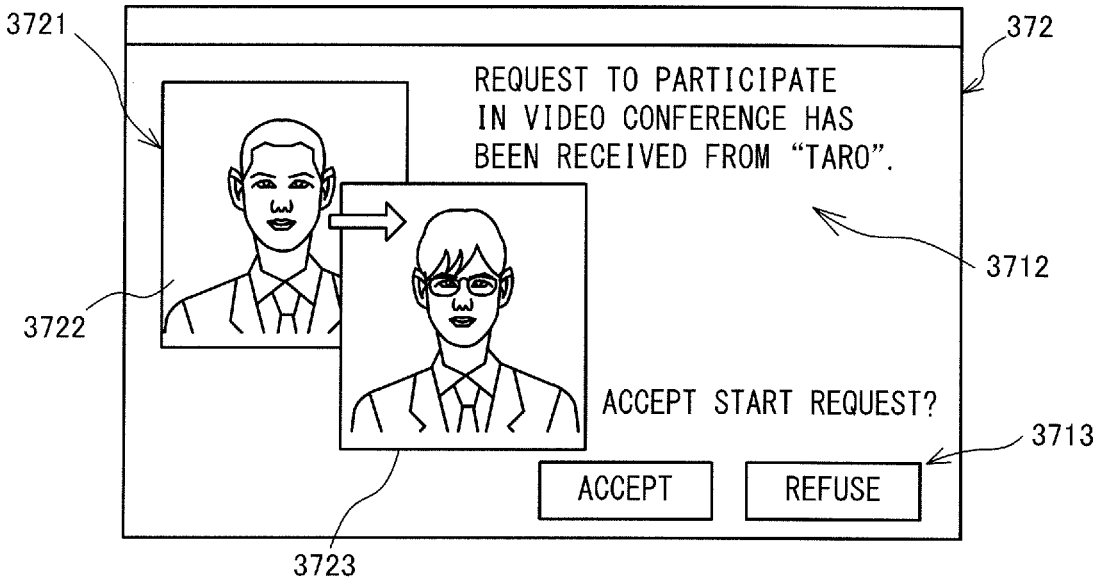

3721
372
REQUEST TO PARTICIPATE
IN VIDEO CONFERENCE HAS
BEEN RECEIVED FROM "TARO".
3712
3722
ACCEPT START REQUEST?
3713
ACCEPT
REFUSE
3723

FIG. 5

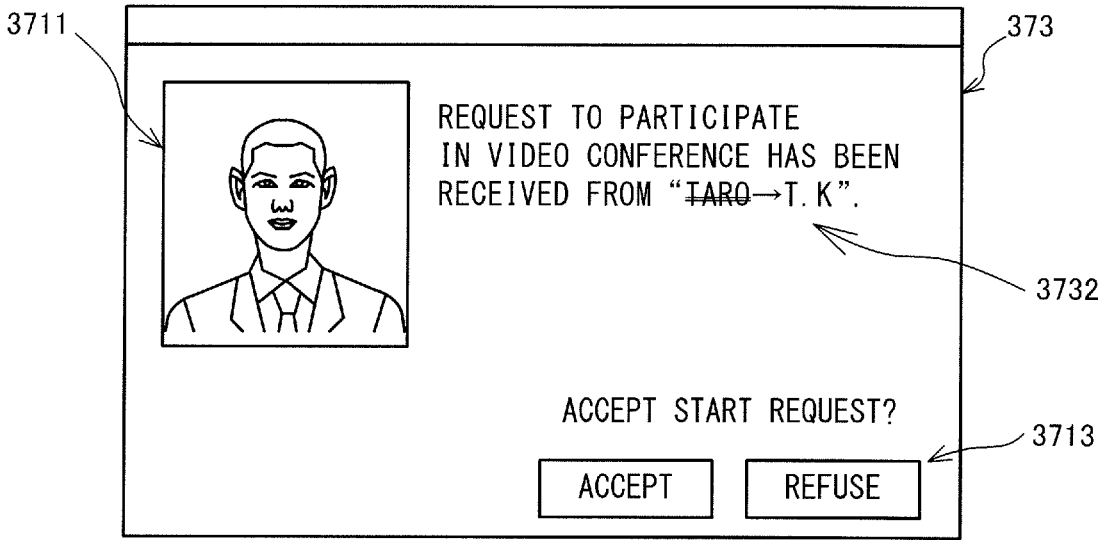

3711
373
REQUEST TO PARTICIPATE
IN VIDEO CONFERENCE HAS BEEN
RECEIVED FROM "~~TARO~~→T.K".
3732
ACCEPT START REQUEST?
3713
ACCEPT
REFUSE

FIG. 6

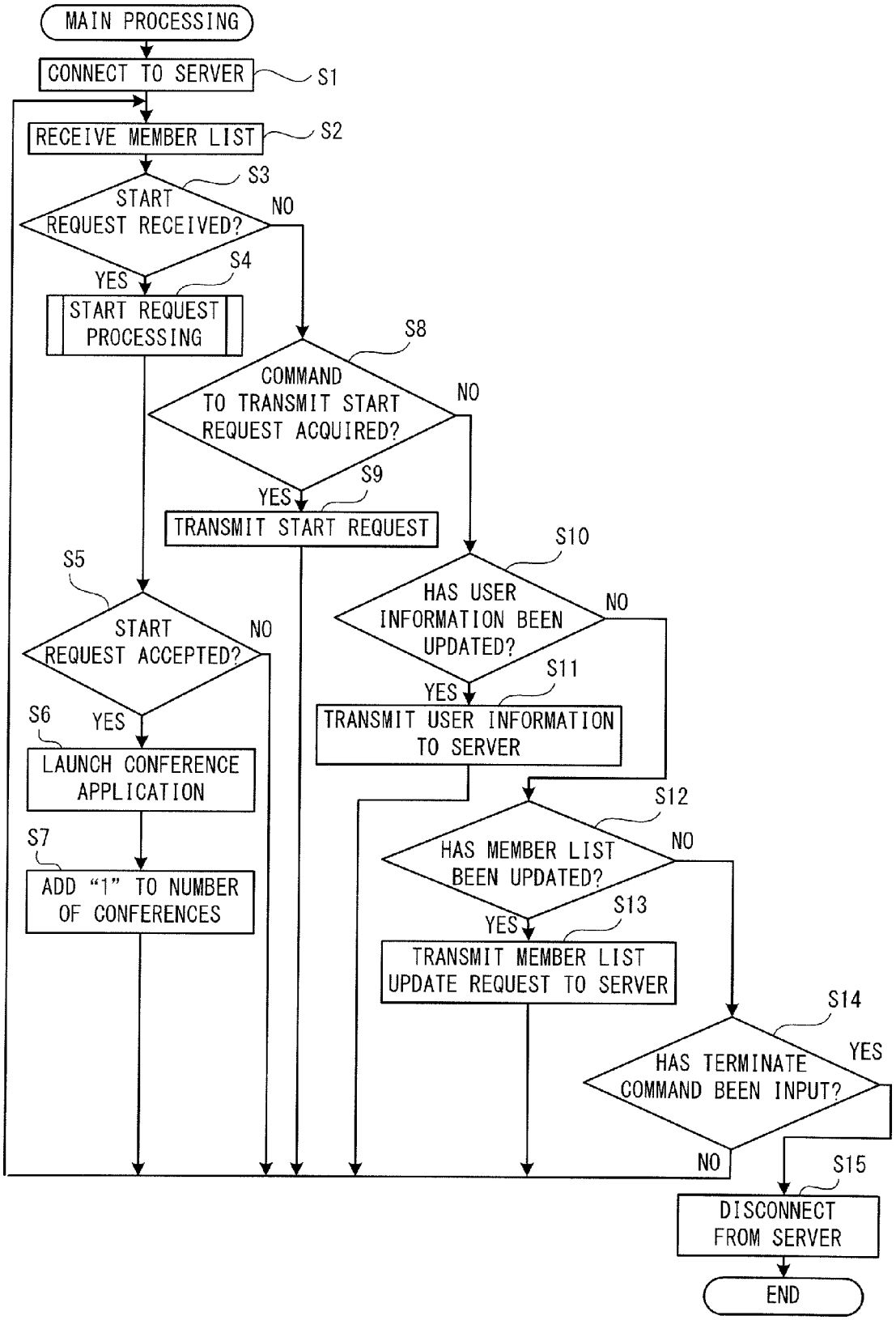
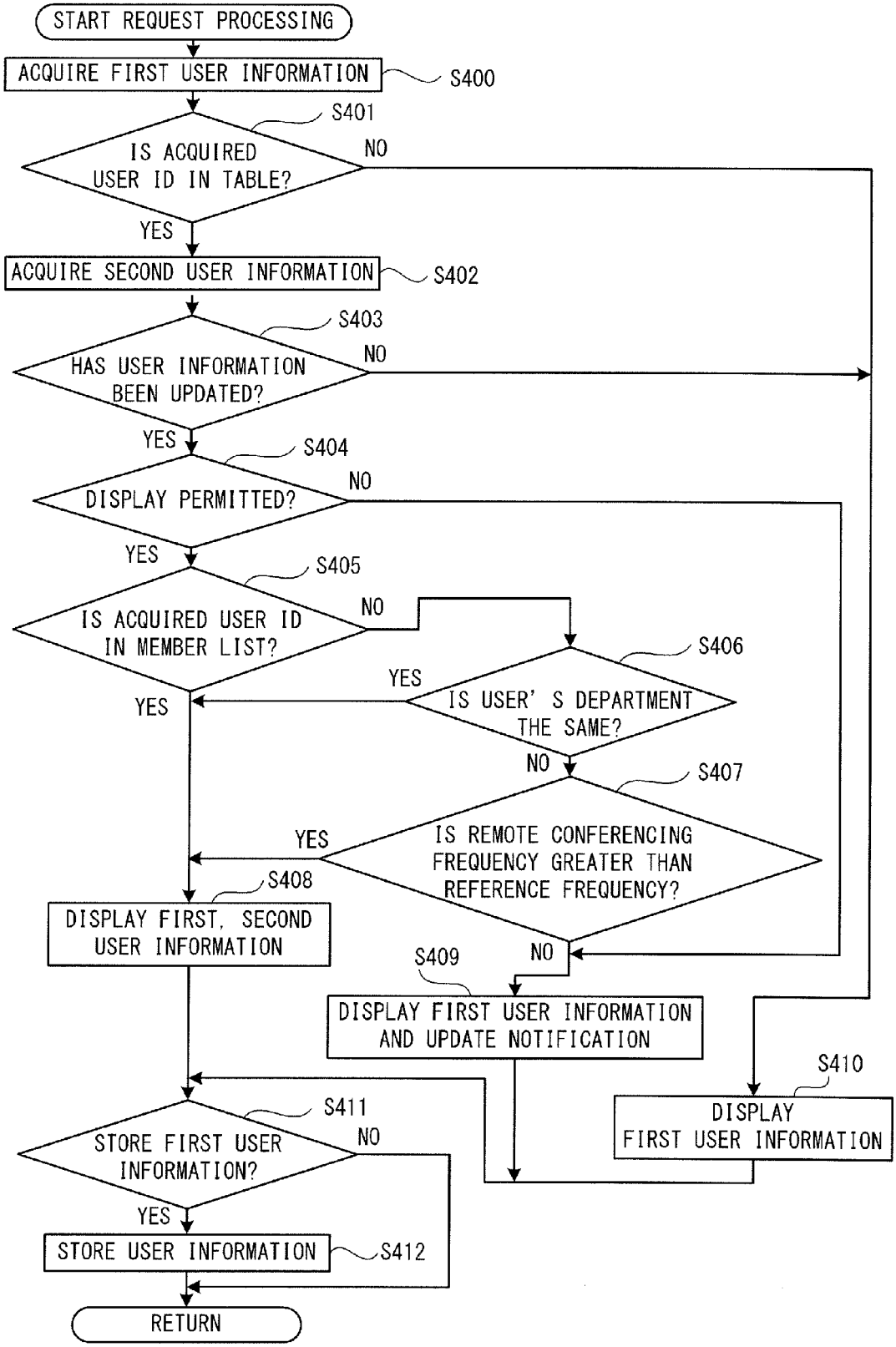

MAIN PROCESSING
CONNECT TO SERVER
S1
RECEIVE MEMBER LIST
S2
START REQUEST RECEIVED?
S3
NO
YES
S4
START REQUEST PROCESSING
COMMAND TO TRANSMIT START REQUEST ACQUIRED?
S8
NO
YES
S9
TRANSMIT START REQUEST
S5
START REQUEST ACCEPTED?
NO
S6
YES
LAUNCH CONFERENCE APPLICATION
S7
ADD "1" TO NUMBER OF CONFERENCES
HAS USER INFORMATION BEEN UPDATED?
S10
NO
YES
S11
TRANSMIT USER INFORMATION TO SERVER
HAS MEMBER LIST BEEN UPDATED?
S12
NO
YES
S13
TRANSMIT MEMBER LIST UPDATE REQUEST TO SERVER
HAS TERMINATE COMMAND BEEN INPUT?
S14
YES
NO
S15
DISCONNECT FROM SERVER
END

FIG. 7


START REQUEST PROCESSING
ACQUIRE FIRST USER INFORMATION
S400
S401
IS ACQUIRED USER ID IN TABLE?
NO
YES
ACQUIRE SECOND USER INFORMATION
S402
S403
HAS USER INFORMATION BEEN UPDATED?
NO
YES
S404
DISPLAY PERMITTED?
NO
YES
S405
IS ACQUIRED USER ID IN MEMBER LIST?
NO
S406
YES
IS USER' S DEPARTMENT THE SAME?
YES
NO
S407
IS REMOTE CONFERENCING FREQUENCY GREATER THAN REFERENCE FREQUENCY?
YES
S408
DISPLAY FIRST, SECOND USER INFORMATION
S409
NO
DISPLAY FIRST USER INFORMATION AND UPDATE NOTIFICATION
S410
DISPLAY FIRST USER INFORMATION
S411
STORE FIRST USER INFORMATION?
NO
YES
STORE USER INFORMATION
S412
RETURN

NON-TRANSITORY COMPUTER-READABLE MEDIUM STORING PROGRAM AND COMMUNICATION DEVICE

CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to Japanese Patent Application Nos. 2012-165399 filed Jul. 26, 2012 and 2013-132045 filed on Jun. 24, 2013, the content of which is hereby incorporated herein by reference.

BACKGROUND

The present disclosure relates to a non-transitory computer readable medium storing a program that allows a communication device to make a request to another communication device for participation in a remote conference, and the communication device.

Systems that enable discussions among users in separate locations by transmitting and receiving video and audio among a plurality of communication devices have become widespread. Remote conferencing systems and the like are examples of these sorts of systems. Remote conferences include, for example, Web conferences, video conferences, video telephone calls, and the like. For example, a remote conferencing system is known in which an image of a user of another communication device who requests participation in a remote conference is displayed on the communication device that has received the request. The user of the communication device that has received the request can check the image of the user of the other communication device and can determine whether or not to permit participation in the remote conference that was requested by the user of the other communication device.

SUMMARY

In the known remote conferencing system that is described above, in a case where the image of the user of the other communication device has been changed, the changed image is displayed on the communication device that has received the request. In this case, an image that is different from the previous image is displayed on the communication device as the image of the user of the other communication device. Therefore, the user of the communication device that received the request may mistakenly believe that the request was received from a user who is different from the user of the other communication device. In this sort of case, the user who received the request may not grant permission to participate in the remote conference that was requested by the user of the other communication device, even in a case where permission to participate in the remote conference should be granted.

Embodiments of the broad principles derived herein provide a non-transitory computer readable medium storing a program that enables a communication device to make it possible for the user to appropriately determine whether or not to grant permission to participate in a remote conference, even in a case where an image of another user of another communication device has been changed, and the communication device.

Embodiments provide a non-transitory computer-readable medium storing computer-readable instructions that, when executed by a processor of a communication device, instruct the processor to perform a process including performing a first receiving that receives a start request from a partner communication device. The partner communication device is another communication device. The start request includes identification information and first user information and requests that a remote conference be started. The identification information identifies a user of the partner communication device. The first user information is user information that pertains to the user identified by the identification information. The computer-readable instructions further instruct the processor to perform a process including acquiring, based on the identification information, second user information stored in a storage portion. The second user information is user information that pertains to the user identified by the identification information included in the start request. The computer-readable instructions further instruct the processor to perform a process including performing a first determining that determines, based on a comparison of the first user information and the second user information, whether the first user information and the second user information differ from one another. The computer-readable instructions further instruct the processor to perform a process including performing a first outputting that outputs a first command in response to determining, in the first determining, that the first user information and the second user information differ from one another. The first command is a command to provide notification of the first user information and the second user information. The computer-readable instructions further instruct the processor to perform a process including performing a second outputting that outputs a second command in response to determining, in the first determining, that the first user information and the second user information do not differ from one another. The second command is a command to provide notification of one of the first user information and the second user information.

Embodiments also provide a non-transitory computer-readable medium storing computer-readable instructions that, when executed by a processor of a communication device, instruct the processor to perform a process including receiving a start request from a server. The start request includes identification information and first user information and requests that a remote conference be started. The identification information identifies a user of a partner communication device. The first user information is user information that pertains to the user identified by the identification information. The computer-readable instructions further instruct the processor to perform a process including determining, based on the identification information included in the start request, whether second user information is stored in a storage portion of the communication device. The second user information is user information that pertains to the user identified by the identification information. The computer-readable instructions further instruct the processor to perform a process including acquiring the second user information from the storage portion in response to determining that the second user information is stored in the storage portion. The computer-readable instructions further instruct the processor to perform a process including outputting a display command to a display portion of the communication device in response to determining that the second user information is stored in the storage portion. The display command is a command to display the first user information and the second user information.

Embodiments further provide a communication device that includes a processor and a memory. The memory stores computer-readable instructions. The computer-readable instructions cause the processor to perform a process including receiving a start request from a partner communication device. The start request includes identification information and first user information and requests that a remote confer-

ence be started. The identification information identifies a user of the partner communication device. The first user information is user information that pertains to the user identified by the identification information. The computer-readable instructions further cause the processor to perform a process including acquiring, based on the identification information, second user information that is stored in a storage portion of the communication device. The second user information is user information that pertains to the user identified by the identification information included in the start request. The computer-readable instructions further cause the processor to perform a process including determining, based on a comparison of the first user information and the second user information, whether the first user information and the second user information differ from one another. The computer-readable instructions further cause the processor to perform a process including outputting a first command to a display portion of the communication device in response to determining that the first user information and the second user information differ from one another. The first command is a command to display the first user information and the second user information. The computer-readable instructions further cause the processor to perform a process including outputting a second command to the display portion in response to determining that the first user information and the second user information do not differ from one another. The second command is a command to display one of the first user information and the second user information.

BRIEF DESCRIPTION OF THE DRAWINGS

Embodiments will be described below in detail with reference to the accompanying drawings in which:

FIG. **1** is a figure that shows an overview a communication system and an electrical configuration of a communication device;

FIG. **2** is a figure that shows an example of a table;

FIG. **3** is a figure that shows a first example of a display image;

FIG. **4** is a figure that shows a second example of a display image;

FIG. **5** is a figure that shows a third example of a display image;

FIG. **6** is a flowchart of main processing; and

FIG. **7** is a flowchart of start request processing that is performed by the main processing in FIG. **6**.

DETAILED DESCRIPTION

A communication system **1** will be explained with reference to FIG. **1**. The communication system **1** includes a server **11** and communication devices **12**, **13**, **14** (hereinafter also collectively referred to as the communication devices **15**). The server **11** and the communication device **15** are connected such that the server **11** and the communication device **15** can communicate with one another through a network **20** by using a specified protocol, such as the Hyper Text Transfer Protocol (HTTP) or the Session Initiation Protocol (SIP), for example. In a case where the communication device **15** is connected to the server **11**, connection information that indicates that the communication device **15** is connected to the server **11** is stored in a storage portion of at least one of the server **11** and the communication device **15**. The connection information may include, for example, user identification information (a user ID), a password, identification information (a session ID) that the server **11** assigns to the connection, and the like. The connection information makes it possible for a sustained connection between the communication device **15** and the server **11** to be established. A series of communications that are performed through the sustained connection is hereinafter referred to as a session.

In a case where a session is being conducted between the server **11** and the communication devices **12**, **13**, **14**, the server **11** transmits to the communication devices **13**, **14**, at regular intervals, information that indicates that the communication device **12** is conducting the session with the server **11**. Information that indicates that the communication devices **13**, **14** are conducting the session with the server **11** is also transmitted in the same manner. Therefore, based on the information, the users of the communication devices **12**, **13**, **14** can know which of the communication devices **12**, **13**, **14** are maintaining the session with the server **11**. The processing that is performed by the communication devices **12**, **13**, **14** may be processing that is performed by an application that is known as a presence client, for example. With the communication system **1**, a remote conference can be conducted in which it is possible for a discussion to be carried out among the users of the communication devices **15** by the transmitting and receiving of video and audio among a plurality of the communication devices **15**, through the server **11**. At the time when the remote conference starts, each of the communication devices **15** transmits to the server **11** a conference connection request that requests a connection to a conference room. The conference connection request includes a user ID that identifies the user who is using the communication device **15** and a conference ID that specifies the conference room. The conference connection request is made by communication in accordance with a specified protocol, such as HTTP or the like, for example. The conference ID may be a specific Uniform Resource Locator (URL), for example. After the server **11** has received the conference connection request from the communication device **15**, media data such as video data, audio data, and the like are transmitted and received between the server **11** and the communication device **15**. Specifically, media data that have been acquired by a camera and a microphone that is connected to the communication device **15** are transmitted to the server **11** together with the user ID and the conference ID. The media data that the server **11** has received from the communication device **15** are transmitted to the other communication devices **15** that are connected to the conference room that is indicated by the same conference ID. In other words, the plurality of the communication devices **15** that are connected to the conference room that is indicated by the same conference ID conduct the remote conference by transmitting and receiving the media data through the server **11**. The remote conference is started in a case where one of the communication devices **15** has received a start request from another one of the communication devices **15** and the start request has been accepted. The start request is a request to start the remote conference. A specific example of the communication device **15** may be a known personal computer (PC). The configuration of the communication system **1** can be modified. For example, the communication system **1** includes only the communication devices **15**. Each one of the communication devices **15** may perform direct communication with another one of communication devices **15**.

An electrical configuration of the communication device **15** will be explained. The communication device **15** includes a CPU **31** that performs control of the communication device **15**. The CPU **31** is electrically connected to a ROM **32**, a RAM **33**, an HDD **34**, a communications interface (I/F) **35**, and an external interface (I/F) **36**. A display portion **37**, a speaker **38**, a microphone **39**, a drive unit **40**, and an operation

portion **41** that are installed in the communication device **15** are also electrically connected to the CPU **31** in the same manner. The display portion **37** may be a display itself, e.g., a Liquid Crystal Display (LCD), or may include a display itself and some interface hardware and/or software between the display itself and an application program. The ROM **32** stores a boot program, a BIOS, and the like. The RAM **33** stores a timer, a counter, and temporary data. The HDD **34** stores programs for causing the CPU **31** to perform main processing (refer to FIG. **6**) and start request processing (refer to FIG. **7**). The HDD **34** also stores a table **341** (described below; refer to FIG. **2**). The communications I/F **35** may perform communication with the server **11** and another communication device **15** through the network **20**. A camera **361** may be connected to the external I/F **36**. The drive unit **40** may read information that is stored in a storage medium **401**. For example, when the communication device **15** is set up, a program that is stored in the storage medium **401** may be read by the drive unit **40** and stored in the HDD **34**. The communication device **15** may receive a program from the server **11** or another server through the network **20** and store the program in the HDD **34**. In that case, the program may be stored in a storage medium such as an HDD or the like that is included in a server that is connected to the communication device **15** through the network **20**. The operation portion **41** may accept an input from the user. The operation portion **41** may be a keyboard, for example. The operation portion **41** may be a mouse that is connected to an external I/F. In a case where the communication device **15** is a tablet-type terminal or a smart phone, the operation portion **41** may be a touch panel that is superposed on the display portion **37**.

The table **341** will be explained with reference to FIG. **2**. Information (hereinafter referred to as the user information) that pertains to another user who is using the other communication device **15** is stored in the table **341** in association with the user IDs. The user information may include, for example, a nickname, a self-introduction, the user's department, a user image, an update date and time, and a number of conferences. These user information items are merely examples. The user information may include one or more of the items. The user information may also include items other than the items listed above. The user ID is identification information that identifies the other user. The nickname is a different name for the other user. The self-introduction includes information that indicates the background or personal history of the other user. The user's department includes information that indicates the other user's affiliation. The user image is an image that shows the other user. The update date and time indicates the date and time of the most recent update to one of the user information items (one of the nickname, the self-introduction, the user's department, and the user image). The update date and time in the table **341** is information that is included in advance in the user information that is received from the server **11**. The number of conferences is the number of times that the communication device **15** has participated in a remote conference with the other communication device **15** that is used by the other user.

In the present embodiment, it is assumed that the user always uses a specific communication device **15**. The user ID may be associated with the identification information that identifies the communication device **15**, and the user ID may also be used as the identification information that identifies the communication device **15**. The identification information that identifies the communication device **15** may be transmitted from the communication device **15** to the server **11** in advance, and may be stored in the storage portion of the server **11**.

The user information for the user of each one of the communication devices **15** may be edited by the user who uses that communication device **15**. At Step S**11** in the main processing (FIG. **6**), which will be described below, the edited user information is transmitted from the communication device **15** to the server **11** together with the user ID (hereinafter also referred to as the communication device **15** user ID) of the user of the communication device **15**. The server **11** stores the received user information in a storage portion (not shown in the drawings) of the server **11**, in association with the user ID. When the user information is received, the server **11**, using a clock function that is provided by the operating system (OS) of the server **11**, acquires the time, then stores that time as the update date and time in the storage portion of the server **11**, in association with the user ID. The server **11** may receive, from the communication device **12**, for example, the start request that is the request to start the remote conference. The user ID (hereinafter also referred to as the communication device **12** user ID) of the user of the communication device **12**, the conference ID of the remote conference, and the user ID (hereinafter also referred to as the communication device **13** user ID) of the user of the communication device **13**, which is the destination for the transmission, may be included in the start request that has been received from the communication device **12**, along with flag information. The flag information indicates whether or not inclusion in a display image of the user information before the change (editing) is permitted. Based on the communication device **12** user ID that is included in the start request that was received, the server **11** may acquire from the storage portion of the server **11** the user information that corresponds to the communication device **12** user ID. The server **11** may incorporate into the start request the communication device **12** user ID, the conference ID, the user information that corresponds to the communication device **12** user ID, and the flag information, then may transmit the start request to the communication device **13**.

The user information may be stored in the HDD **34** of the communication device **15**. The communication device **15** may create the start request that includes the communication device **15** user ID, the conference ID, the user information that is stored in the HDD **34**, and the user ID (hereinafter also referred to as the other communication device **15** user ID) of the user of the other communication device **15**, and may transmit the start request to the other communication device **15** through the server **11**.

In a case where the CPU **31** has received the start request from the other communication device **15** through the server **11**, the CPU **31** then displays, on the display portion **37** (refer to FIG. **1**), a display image (for example, one of display images **371** to **373** (described below; refer to FIGS. **3** to **5**)) that includes at least one of the user information items that are included in the start request. In a state in which a session is already being conducted with the server **11**, the display image is displayed in a case where a start request is received through the server **11** from the other communication device **15**.

FIG. **3** shows a first example (the display image **371**) of the display image that is displayed on the display portion **37**. The display image **371** includes a user image **3711**, text **3712**, and selection buttons **3713**. The user image **3711** is the user image (taro.jpg or the like) that is included in the user information. The text **3712** provides notification that indicates that a request to participate in a video conference has been received. The text **3712** includes the nickname "TARO" that is included in the user information. The selection buttons **3713** are buttons that enable the user to select whether or not to start a remote conference in response to the start request from the

other communication device **15**. The selection buttons **3713** include an Accept button and a Refuse button. The user image that is included in the user information may be image data itself. The user image included in the user information may be address information for image data that are stored in the storage portion of the server **11**.

By checking the user image **3711** and the nickname that are included in the display image **371**, the user of the communication device **15** who is looking at the display image **371** determines whether or not to accept the start request to participate in a remote conference that uses the conference room and that has been requested by the other user who is using the other communication device **15**. In a case where the user accepts the start request to participate in the remote conference, the user may select the Accept button of the selection buttons **3713**. In that case, by transmitting to the server **11** a conference connection request that includes the conference ID and the communication device **15** user ID, the communication device **15** starts the remote conference that uses the conference room that corresponds to the conference ID. The communication device **15** transmits to the server **11** video data that have been captured by the camera **361** that is connected to the communication device **15** and audio data that have been collected by the microphone **39**. From the server **11**, the communication device **15** receives video data and audio data that have been transmitted from the other communication device **15**. In contrast, in a case where the user refuses the start request for the remote conference that uses the conference room and that has been requested by the other user, the user may select the Refuse button of the selection buttons **3713**. In that case, the communication device **15** does not transmit the conference connection request to the server **11**.

As described above, the user can recognize the other user by checking the user information (the user image **3711** and the nickname) that is included in the display image **371**. Therefore, the user can determine appropriately whether or not to accept the start request to participate in the remote conference that uses the conference room and that was requested by the other user.

In a case where the user information for the other user who uses the other communication device **15** has been changed, for example, one of a second example (the display image **372**; refer to FIG. **4**) and a third example (the display image **373**; refer to FIG. **5**) of the display image may be displayed on the display portion **37**.

FIG. **4** shows the second example (the display image **372**) of the display image. The display image **372** is an example of the display image that is displayed in a case where the user image in the user information has been changed. The display image **372** differs from the display image **371** (refer to FIG. **3**) in that the user image **3711** (refer to FIG. **3**) has been changed to a user image **3721**. The text **3712** and the selection buttons **3713** are the same as in the display image **371**. The user image **3721** includes a user image **3722** before the change and a user image **3723** after the change. An arrow that points from the user image **3722** to the user image **3723** is also displayed. The user image **3721** shows that the user image in the user information for the user of the other communication device **15** has been changed from the user image **3722** to the user image **3723**.

The user who looks at the display image **372** can check the user image **3723** after the change in association with the user image **3722** before the change. Therefore, even in a case where the user image for the other user has been changed, the user can confirm that the user image **3723** after the change is a user image that is associated with the other user, who is shown in the user image **3722** before the change. The user who received the start request for the remote conference that uses the conference room and that has been requested by the other user can determine appropriately whether or not to accept the start request to participate in the remote conference. Therefore, it is possible to prevent the user from refusing the start request for the remote conference by mistake when the user should participate in the remote conference.

FIG. **5** shows the third example (the display image **373**) of the display image. The display image **373** is an example of the display image that is displayed in a case where the nickname in the user information has been changed. The display image **373** differs from the display image **371** (refer to FIG. **3**) in that the text **3712** (refer to FIG. **3**) has been changed to a text **3732**. The user image **3711** and the selection buttons **3713** are the same as in the display image **371**. The text **3732** includes the nickname "TARO" before the change and a nickname "T.K." after the change. An arrow that points from the nickname "TARO" to the nickname "T.K." is also displayed. The nickname "TARO" is crossed out by two horizontal lines. The text **3732** shows that the nickname in the user information for the other user has been changed from "TARO" to "T.K."

The user who looks at the display image **373** can check the nickname "T.K." after the change in association with the nickname "TARO" before the change. Therefore, even in a case where the nickname for the other user has been changed to "T.K.", the user can confirm that the nickname "T.K." after the change is a nickname that is associated with the other user, who is specified by the nickname "TARO" before the change. Thus the user can determine appropriately whether or not to accept the start request to participate in the remote conference. Therefore, it is possible to prevent the user from refusing the start request for the remote conference by mistake when the user should participate in the remote conference.

The form of the display image may be changed. For example, in the display image **372**, it is acceptable for the user image **3722** and the user image **3723** not to be displayed on the display portion **37** at the same time. To take a specific example, it is acceptable for only the user image **3722** before the change to be included in the display image **372** at the time when the display of the display image **372** on the display portion **37** is started. The user image **3722** before the change may then be gradually changed into the user image **3723** after the change.

The user information that is included in the display image may be changed. For example, it is acceptable for the user image and the nickname not to be included in the display image. At least one of the user image, the nickname, the self-introduction, the user's department, and the number of conferences may be included as the user information in the display image. Another item in the user information may be included in the display image.

The main processing will be explained with reference to FIG. **6**. In a state in which the power supply to the communication device **15** has been turned on and the communication device **15** has been connected to the network **20**, the CPU **31** starts the main processing by reading and executing a program that is stored in the HDD **34** of the communication device **15**. The main processing is not limited to the example in which the main processing is performed by the CPU **31**. The main processing may be performed by another electronic component (for example, Application Specific Integrated Circuits (ASIC)). The main processing may be performed by distributed processing by a plurality of electronic devices (that is, a plurality of CPUs). A portion of the main processing may be performed by the server **11**, which is connected to the communication device **15** through the network **20**.

At Step S1, the CPU **31** connects to the server **11** via the communication I/F **35**. For example, the CPU **31** may transmit, to the server **11** via the communication I/F **35**, a connection request that includes at least one of the user ID and the password. The server **11** determines whether the user ID and the password that are included in the connection request from the communication device **15** are included in a user management table (not shown in the drawings) that is stored in the storage portion of the server **11**. In a case where the user ID and the password are included in the user management table, the server **11** stores the connection information that corresponds to the user ID in the storage portion of the server **11**. After storing the connection information, the server **11** transmits the user information that corresponds to the user ID to the communication device **15**. The CPU **31** stores, in the RAM **33**, the user information that has been received from the server **11** via the communication I/F **35**. The user information may be transmitted from the communication device **15** to the server **11** in advance and may be stored in the storage portion of the server **11** in association with the user ID.

At Step S2, the CPU **31** receives, via the communication I/F **35**, a member list that has been transmitted from the server **11**. The member list is stored in the storage portion of the server **11** and includes a user ID for another user of at least one other communication device **15**, in association with the user ID of the user of the communication device **15** in which the CPU **31** resides. Before Step S2 is executed, the server **11**, based on the at least one of the user IDs for the other users that is included in the member list, searches for the connection information for the individual user IDs that are included in the member list. The server **11** then transmits to the communication device **15** the at least one of the user IDs for the other users that is included in the member list as well as the connection information for each of the user IDs in the member list. The CPU **31** stores, in the RAM, the received member list that has been received from the server **11** via the communication I/F **35**. Then the CPU **31** outputs to the display portion **37** a command to display the member list that has been received from the server **11** via the communication I/F **35** as well as the connection information for each of the user IDs. By looking at the display content on the display portion **37**, the user of the communication device **15** can determine whether or not the users who correspond to the user IDs that are included in the member list are connected to the server **11**. The member list may be transmitted from the communication device **15** in advance and may be stored in the storage portion of the server **11**.

At Step S3, the CPU **31** determines whether a start request has been received from the server **11** via the communication I/F **35**. In a case where the CPU **31** has received the start request from the server **11** via the communication I/F **35** (YES at Step S3), the CPU **31** stores the start request in the RAM **33**, and the processing advances to Step S4. In contrast, in a case where the CPU **31** has not received the start request from the server **11** via the communication I/F **35** (NO at Step S3), the processing advances to Step S8.

At Step S4, the CPU **31** performs the start request processing, which is shown in FIG. **7**. The start request processing will be described in detail below. After the processing at Step S4 has been completed, the CPU **31** advances the processing to Step S5.

At Step S5, the CPU **31** determines whether the start request that was received from the server **11** at Step S3 has been accepted. For example, in a case where an input to the Accept button of the selection buttons **3713** in the display image that is displayed on the display portion **37** in accordance with the processing that is performed at one of Steps S408, S409, and S410 in FIG. **7** has been acquired from the operation portion **41** (YES at Step S5), the CPU **31** advances the processing to Step S6. In contrast, in a case where an input to the Accept button of the selection buttons **3713** has not been acquired from the operation portion **41**, and an input to the Refuse button of the selection buttons **3713** has been acquired from the operation portion **41** (NO at Step S5), the CPU **31** returns the processing to Step S2.

At Step S6, the CPU **31** starts the remote conference by launching a conference application that is stored in the HDD **34**. In launching the conference application, the CPU **31** defines the conference ID that is included in the start request that was received at Step S3 as a parameter for the conference application. The CPU **31** starts the remote conference by executing the conference application to transmit to the server **11** a conference connection request that includes the conference ID and the communication device **15** user ID. The CPU **31** then advances the processing to Step S7.

At Step S7, the CPU **31** adds "1" to the number of conferences that corresponds to the user ID of the user of the other communication device **15** that is the source of the start request. For example, the CPU **31** may search the table **341** that is stored in the HDD **34**, using as a search key the other communication device **15** user ID that is included in the start request that was received via the communication I/F **35** at Step S3. The CPU **31** then may add "1" to the numerical value of the number of conferences that is stored, among the items that are included in the table **341**, in association with the other communication device **15** user ID. Then the CPU **31** returns the processing to Step S2.

In a case where, at Step S3, the start request has not been received from the server **11** (NO at Step S3), the CPU **31** determines at Step S8 whether the CPU **31** has acquired from the operation portion **41** a command to transmit a start request. For example, the CPU **31** may acquire from the operation portion **41** a command to select, from the member list that is being displayed on the display portion **37** at Step S2, by the user of the communication device **15**, a user ID of a user of another communication device **15** that is connected to the server **11**. At this time, the CPU **31** may also acquire from the operation portion **41** a command to one of approve and reject inclusion in the display image of the user information before the change. In that case, the CPU **31** determines that the CPU **31** has acquired from the operation portion **41** the command to transmit the start request (YES at Step S8), and the processing advances to Step S9. In contrast, in a case where the CPU **31** has determined that the CPU **31** has not acquired from the operation portion **41** the command to transmit the start request (NO at Step S8), the processing advances to Step S10. The command to transmit the start request is not limited to being a command to select from the member list. For example, the other communication device **15** user ID may be input directly from the operation portion **41**. In that case, the CPU **31** may transmit, to the server **11** via the communication I/F **35**, the other communication device **15** user ID that was acquired from the operation portion **41**. In a case where the user ID that the server **11** has received is included in the user management table that is stored in the storage portion of the server **11**, the server **11** may transmit back to the communication device **15** the other communication device **15** user ID and the connection information that corresponds to the other communication device **15** user ID. The user of the communication device **15** may then check display content that is based on the other communication **15** user ID and the connection information that have been transmitted back to the communication device **15** from the server **11** via the communication I/F **35**, and may input to the operation portion **41** a

command to transmit a start request. In that case, the CPU **31** may determine that the CPU **31** has acquired from the operation portion **41** the command to transmit the start request.

At Step S**9**, the CPU **31** transmits the start request to the server **11** via the communication I/F **35**, including in the start request the communication device **15** user ID, the conference ID for the remote conference, the user ID of the user of the other communication device **15** that has been selected, and the flag information that indicates whether or not the inclusion in the display image of the user information before the change is permitted. As described above, the server **11** transmits the start request to the other communication device **15**, including in the start request the user ID of the user of the communication device **15** that issued the start request, the conference ID, and the user information that corresponds to the user ID of the user of the communication device **15** that issued the start request. After transmitting the start request to the server **11**, the CPU **31** returns the processing to Step S**2**.

In a case where, at Step S**8**, the command to transmit the start request has not been acquired (NO at Step S**8**), the CPU **31** determines, at Step S**10**, whether the user information has been updated. For example, in a case where a command to change to the user information has been acquired from the operation portion **41**, the CPU **31** determines that the user information has been updated. The command to change to the user information may be issued by using the operation portion **41** to make an input on a user information edit screen, for example. In a case where it is determined that the user information has been updated (YES at Step S**10**), the CPU **31** updates the user information that the CPU **31** received at Step S**1** and stored in the RAM **33**, and the processing advances to Step S**11**. In contrast, in a case where it is determined that the user information has not been updated (NO at Step S**10**), the CPU **31** advances the processing to Step S**12**.

At Step S**11**, the CPU **31** transmits, to the server **11** via the communication I/F **35**, the user information item, based on the input to the user information edit screen via the operation portion **41** at Step S**10**, and the communication device **15** user ID. The server **11** updates the user information that corresponds to the received user ID. The server **11** updates the update date and time in the user information that corresponds to the received user ID, updating the update date and time to the time when the server **11** received the user information in response to the processing at Step S**11**. For example, in a case where the nickname has been changed at Step S**10**, the changed nickname and the communication device **15** user ID are transmitted to the server **11** via the communication I/F **35** at Step S**11**. In a case where the user image has been changed at Step S**10**, the image data that correspond to the changed user image and the communication device **15** user ID are transmitted to the server **11** via the communication I/F **35** at Step S**11**. After transmitting the user information, the CPU **31** returns the processing to Step S**2**.

In a case where, at Step S**10**, the user information has not been updated (NO at Step S**10**), the CPU **31** determines, at Step S**12**, whether the member list has been updated. The determination as to whether the member list has been updated is made based on an input that is acquired from the operation portion **41**. For example, in a case where the CPU **31** has acquired via the operation portion **41** a command to delete a user ID of a user of another communication device **15** from the member list that was output to the display portion **37** at Step S**2**, the CPU **31** determines that the member list has been updated. To take another example, in a case where a user ID of a user of another communication device **15** has been input directly from the operation portion **41** to be added to the member list, the CPU **31** transmits the input user ID of the user of the other communication device **15** to the server **11** via the communication I/F **35**. In a case where the received other communication device **15** user ID is included in the user management table that is stored in the storage portion of the server **11**, the server **11** transmits back to the communication device **15** the other communication device **15** user ID, along with the connection information that corresponds to the other communication device **15** user ID. The user of the communication device **15** then may check the display content that is based on the user ID and the connection information that have been received from the server **11** via the communication I/F **35**, and may input to the operation portion **41** a command to register the member list. In that case, the CPU **31** may determine that the member list has been updated. In a case where it is determined that the member list has been updated (YES at Step S**12**), the CPU **31** advances the processing to Step S**13**. In contrast, in a case where it is determined that the member list has not been updated (NO at Step S**12**), the CPU **31** advances the processing to Step S**14**.

At Step S**13**, the CPU **31**, based on the input that was acquired via the operation portion **41** at Step S**12**, transmits a member list update request to the server **11** via the communication I/F **35**. The member list update request includes the other communication device **15** user ID, input content information, and the user ID of the user of the communication device **15** that is transmitting the request. The input content information is information that indicates whether the other communication device **15** user ID is to be deleted from the member list or added to the member list. The server **11** updates the member list that corresponds to the received user ID of the user of the communication device **15** that transmitted the member list update request. After transmitting the member list update request, the CPU **31** returns the processing to Step S**2**.

In a case where, at Step S**12**, the member list has not been updated (NO at Step S**12**), the CPU **31**, at Step S**14**, based on an input that has been acquired from the operation portion **41**, determines whether a terminate command has been input. For example, in a case where an input to terminate the main processing has been made via the operation portion **41**, the CPU **31** determines that the terminate command has been input. In a case where it is determined that the terminate command has been input (YES at Step S**14**), the CPU **31** advances the processing to Step S**15**. In contrast, in a case where it is determined that the terminate command has not been input (NO at Step S**14**), the CPU **31** returns the processing to Step S**2**.

At Step S**15**, the CPU **31** disconnects from the server **11**. For example, the CPU **31** may transmit a command to delete the connection information to the server **11** via the communication I/F **35**, with the command includes the communication device **15** user ID. The server **11** may delete from the storage portion of the server **11** the connection information that corresponds to the received communication device **15** user ID. After deleting the connection information, the server **11** may transmit to the communication device **15** information that indicates that the session with the server **11** has been terminated. By receiving via the communication I/F **35** the information that indicates that the session with the server **11** has been terminated, the CPU **31** completes disconnection from the server **11**. The CPU **31** then may terminate the main processing.

The start request processing that is performed at Step S**4** of the main processing in FIG. **6** will be explained with reference to FIG. **7**. At Step S**400**, the CPU **31** acquires, from the start request that is stored in the RAM **33**, the user information (hereinafter referred to as the first user information) and

the flag information that are included in the start request. The CPU **31** stores the first user information and the flag information that the CPU **31** has acquired in the RAM **33**.

The CPU **31** determines whether the user ID (hereinafter referred to as the acquired user ID) that is included in the user information that was acquired at Step S**400** is stored in the table **341** (Step S**401**). For example, the CPU **31** may search the user IDs in the table **341** that is stored in the HDD **34** to see if the acquired user ID is among the user IDs in the table **341**. In a case where the acquired user ID is stored in the table **341** (YES at Step S**401**), the CPU **31** advances the processing to Step S**402**. In contrast, in a case where the acquired user ID is not stored in the table **341** (NO at Step S**401**), the CPU **31** advances the processing to Step S**410**.

At Step S**402**, the CPU **31** reads the user information that corresponds to the acquired user ID (hereinafter referred to as the second user information) from the table **341** that is stored in the HDD **34**, then stores the second user information in the RAM **33**. Then, the CPU **31** advances the processing to Step S**403**. The second user information is the user information that was included in the start request that was received from the server **11** at Step S**3** in the main processing (refer to FIG. **6**) during a session that was conducted in the past, and the second user information has been stored in the table **341** at Step S**412**, which will be described below.

At Step S**403**, the CPU **31** determines whether the first user information and the second user information differ from one another. A case where the first user information and the second user information differ from one another is a case where the first user information was updated after the second user information was stored in the table **341**. The CPU **31** compares the update date and time for the first user information that was stored in the RAM **33** at Step S**400** with the update date and time for the second user information that was stored in the RAM **33** at Step S**402** (Step S**403**). In a case where the update dates and times match, the first user information is the same as the second user information. In that case, the CPU **31** determines that the first user information and the second user information do not differ from one another (NO at Step S**403**), the processing advances to Step S**410**.

In a case where the update date and time for the first user information is more recent than the update date and time for the second user information, the first user information has been updated more recently than the second user information. In this case, the CPU **31** determines whether, within the first user information, display user information that is included in the display image that is displayed on the display portion **37** has been updated. The display user information is information that includes at least one of the items in the user information, that is, at least one of the nickname, the self-introduction, the user's department, and the user image, for example. The CPU **31** determines which of the items have been updated by taking the display user information from the first user information and the display user information from the second user information and comparing the two.

For example, in a case where one of the display image **372** (refer to FIG. **4**) and the display image **373** (refer to FIG. **5**) is displayed, the display user information includes the user image and the nickname. The user image and the nickname that are included in the first user information are compared to the user image and the nickname that are included in the second user information. Specifically, in a case where the user images are compared, for example, the CPU **31** may determine whether the user image has been updated by computing hash values for both of the user images and comparing the computed hash values. For example, in a case where the nicknames are compared, the determination as to whether the nickname has been updated may be made by comparing the code information (ASCII code or the like) for the individual characters of the nicknames. In a case where both the user images and the nicknames match, it may be determined that the display user information has not been updated. In a case where a difference is found at least one of between the two user images and between the two nicknames, it may be determined that the display user information has been updated. In a case where it is determined that the display user information has not been updated, that is, that the first user information and the second user information do not differ from one another (NO at Step S**403**), the CPU **31** advances the processing to Step S**410**.

In contrast, in a case where it is determined that the display user information has been updated, that is, that the first user information and the second user information differ from one another (YES at Step S**403**), the CPU **31** determines whether the flag information that was acquired at Step S**400** indicates that the inclusion in the display image of the user information that is included in the second user information (that is, the user information before the update) is permitted (Step S**404**). The CPU **31** makes the determination by referencing the flag information that was stored in the RAM **33** at Step S**400**. In a case where the flag information that is stored in the RAM **33** does not permit the user information before the update to be included in the display image (NO at Step S**404**), the CPU **31** advances the processing to Step S**409**. In contrast, in a case where the flag information that is stored in the RAM **33** permits the user information before the update to be included in the display image (YES at Step S**404**), the CPU **31** advances the processing to Step S**405**.

At Step S**405**, the CPU **31** determines whether the acquired user ID that is included in the first user information is included in the member list that was acquired at Step S**2** of the main processing that is shown in FIG. **6**. For example, the CPU **31** may make the determination at Step S**405** by comparing the acquired user ID that was acquired at Step S**401** with the user IDs that are included in the member list that is stored in the RAM **33**. In a case where the acquired user ID is included in the member list, it is conceivable that the user of the communication device **15** has frequently made contacts, including remote conferences, with the user who corresponds to the acquired user ID. In other words, in a case where the acquired user ID is included in the member list, it is conceivable that the user of the communication device **15** has frequently checked the second user information that corresponds to the acquired user ID. Therefore, presenting to the user of the communication device **15** the second user information that corresponds to the acquired user ID shows to the user of the communication device **15** that the second user information and the first user information correspond to the same acquired user ID, thereby increasing the convenience to the user. In a case where the acquired user ID that is included in the first user information is included in the member list (YES at Step S**405**), the CPU **31** advances the processing to Step S**408**. In contrast, in a case where the acquired user ID that is included in the first user information is not included in the member list (NO at Step S**405**), the CPU **31** advances the processing to Step S**406**.

At Step S**408**, the CPU **31** creates a display image (for example, one of the display image **372** and the display image **373**) that includes the display user information (the display user information before the update) that is included in the second user information and the display user information (the updated display user information) that is included in the first user information. The CPU **31** transmits to the display portion

37 a command to display the created display image. Then the CPU 31 advances the processing to Step S411.

In a case where the determination at Step S405 is NO, the CPU 31, at Step S406, determines whether the user's department that is included in the second user information is the same as the user's department that is included in the user information that corresponds to the communication device 15 user ID. For example, the CPU 31 may make the determination at Step S406 by comparing the user's department that is included in the second user information with the user's department that is included in the user information that corresponds to the communication device 15 user ID and that was stored in the RAM 33 at one of Steps S1 and S10 of the main processing that is shown in FIG. 6. In a case where the user's department that is included in the second user information is the same as the user's department that is included in the user information that corresponds to the communication device 15 user ID, it is conceivable that the user of the communication device 15 is directly acquainted with the user who corresponds to the acquired user ID. Therefore, presenting to the user of the communication device 15 the second user information that corresponds to the acquired user ID shows to the user of the communication device 15 that the second user information and the first user information correspond to the same acquired user ID, thereby increasing the convenience to the user. In a case where it is determined that the user's department that is included in the second user information is the same as the user's department that is included in the user information that corresponds to the communication device 15 user ID (YES at Step S406), the CPU 31 advances the processing to Step S408. In contrast, in a case where it is determined that the user's department that is included in the second user information is not the same as the user's department that is included in the user information that corresponds to the communication device 15 user ID (NO at Step S406), the CPU 31 advances the processing to Step S407.

In a case where the determination at Step S406 is NO, the CPU 31, at Step S407, determines whether the frequency with which remote conferences are held with the user of the other communication device 15 who corresponds to the acquired user ID is greater than a reference frequency. For example, in a case where the number of conferences that is included in the second user information is greater than a specified number (for example, 5), the CPU 31 may determine that the frequency with which remote conferences are held is greater than the reference frequency. In a case where the number of conferences is greater than the specified number, there is a strong possibility that the user of the communication device 15 may remember the user who corresponds to the acquired user ID. Therefore, presenting to the user of the communication device 15 the second user information that corresponds to the acquired user ID shows to the user of the communication device 15 that the second user information and the first user information correspond to the same acquired user ID, thereby increasing the convenience to the user. In a case where it is determined that the frequency of the remote conferences is greater than the reference frequency (YES at Step S407), the CPU 31 advances the processing to Step S408. In contrast, in a case where it is determined that the frequency of the remote conferences is not greater than the reference frequency (NO at Step S407), the CPU 31 advances the processing to Step S409. The reference frequency may be either one of a fixed value that is set in advance and a variable value that can be set by the user.

At Step S409, the CPU 31 creates a display image that includes the display user information (the updated display user information) that is included in the first user information and text information (for example, "User image has been updated" or the like) that indicates that the display user information has been updated. The CPU 31 transmits to the display portion 37 a command to display the created display image. Then the CPU 31 advances the processing to Step S411.

In a case where the determination at Step S401 is NO, as well as in a case where the determination at Step S403 is NO, the CPU 31 performs the processing at Step S410. At Step S410, the CPU 31 creates a display image (for example, the display image 371) that includes the display user information that is included in the first user information. The CPU 31 transmits to the display portion 37 a command to display the created display image. Then the CPU 31 advances the processing to Step S411.

In a case where the determination at Step S403 is NO, the CPU 31, at Step S410, may create and display on the display portion 37 a display image that includes the display user information that is included in the second user information, instead of the display user information that is included in the first user information. In this case, the first user information and the second user information are the same. Therefore, even in a case where a display image has been created that includes the display user information that is included in the second user information, instead of the display user information that is included in the first user information, the same display image is created and displayed on the display portion 37. In a case where the determination at Step S401 is NO, the second user information does not exist. In this case, at Step S410, the CPU 31 may create the display image that includes the display user information that is included in the first user information, as described above.

At Step S411, the CPU 31 determines whether to store the first user information in the table 341. For example, in a case where it was determined at Step S401 that the user information that corresponds to the acquired user ID is not stored in the table 341 (NO at Step S401), the CPU 31 determines to store the first user information in the table 341 (YES at S411). The CPU 31 also determines to store the first user information in the table 341 (YES at S411) in a case where it was determined at Step S403 that the update date and time for the first user information is more recent than the update date and time for the second user information (YES at Step S403). In contrast, in a case where it was determined at Step S401 that the user information that corresponds to the acquired user ID is stored in the table 341 (YES at Step S401), and it was determined at Step S403 that the display user information has not been updated (NO at Step S403), the CPU 31 determines not to store the first user information in the table 341 (NO at S411). In this case, the second user information that is the same as the first user information has already been stored in the table 341, so there is no need to newly store the first user information in the table 341. In a case where the CPU 31 has determined to store the first user information in the table 341 (YES at S411), the CPU 31 advances the processing to Step S412. In contrast, in a case where the CPU 31 has determined not to store the first user information in the table 341 (NO at S411), the CPU 31 terminates the start request processing and advances the processing to Step S5 of the main processing that is shown in FIG. 6.

At Step S412, the CPU 31 stores the first user information in the table 341 in association with the acquired user ID. In a case where the user information that corresponds to the acquired user ID has already been stored in the table 341, the CPU 31 uses the first user information to update the user information that corresponds to the acquired user ID. Then

the CPU **31** terminates the start request processing and advances the processing to Step S**5** of the main processing that is shown in FIG. **6**.

As has been explained above, in a case where the second user information and the first user information differ from one another at the time when the communication device **15** starts the session, the determination is made that the user information has been updated. In that case, the communication device **15** can notify the user of the communication device **15**, associating the first user information and the second user information with one another. The user of the communication device **15** can thus easily be made aware that the first user information is information that pertains to the other user who corresponds to the second user information. Therefore, the user can determine appropriately whether or not to start the session with the other communication device **15**.

Furthermore, by displaying one of the display image **372** (refer to FIG. **4**) and the display image **373** (refer to FIG. **5**) on the display portion **37**, for example, the communication device **15** can make the user aware of the first user information and the second user information at the same time. The communication device **15** can therefore more easily make the user aware that the first user information is information that indicates the other user who corresponds to the second user information.

By displaying the display image **372** (refer to FIG. **4**), for example, on the display portion **37**, the communication device **15** can make the user aware of the user image. The communication device **15** can therefore easily make the user aware, at a glance, that the first user information is information that indicates the other user who corresponds to the second user information.

The communication device **15** can store, as the second user information in the table **341**, the first user information that is included in the start request that was received from the other communication device **15**. Therefore, the communication device **15** can acquire the second user information appropriately and reliably by referencing the table **341**.

Furthermore, by referencing the user ID of the user of the other communication device **15** that transmitted the start request, the communication device **15** can extract from the table **341** the second user information that is associated with the user ID. The communication device **15** can therefore acquire the second user information accurately.

Moreover, even in a case where the display user information has been updated (YES at Step S**403**), in a case where the flag information that does not permit the user information before the update to be included in the display image has been stored in the RAM **33** (NO at Step S**404**), the communication device **15** displays on the display portion **37** the display user information that is included in the first user information and the text information that indicates that the display user information has been updated (Step S**409**). The communication device **15** can thus to prevent the providing of the second user information to the user. Moreover, the communication device **15** can notify the user that the second user information has been updated, without providing the second user information itself.

The present disclosure is not limited to the embodiment that has been described above, and various types of modifications can be made. The table **341** may be stored in the server **11**. The communication device **15** may store the user information in the table **341** by performing communication with the server **11**. The communication device **15** may store the user information in the HDD **34**. The user does not have to always use a specific communication device **15**. The user may use any communication device **15**.

The determination as to whether or not the second user information has been updated may be made by directly comparing the items that are included in the second user information (for example, the nickname, the self-introduction) right from the start, without referencing the update date and time.

The providing of the user information to the user is not limited to displaying on the display portion **37**. For example, the communication device **15** may also provide the user information to the user by outputting to the speaker **38** audio that indicates the user information (for example, the nickname).

At Step S**407** of the start request processing (refer to FIG. **7**) in the embodiment that is described above, the number of conferences is used as an indicator of the frequency of the remote conferences. However, the length of time that has elapsed since the last remote conference that was conducted with the communication device **15** of the user who corresponds to the acquired user ID may be used as the indicator of the frequency of the remote conferences. In that case, the date and time of the last remote conference that was conducted with the communication device **15** of the user who corresponds to the acquired user ID may be stored in the table **341** instead of or in addition to the number of conferences. Then, at Step S**7** of the main processing that is shown in FIG. **6**, the time when the conference application was launched at Step S**6** may be stored in the table **341** instead of or in addition to the adding of 1 to the number of conferences in the table **341**.

In the start request processing that is shown in FIG. **7**, it is acceptable for the processing of at least one of Steps S**404**, S**405**, S**406**, and S**407** not to be performed.

The apparatus and methods described above with reference to the various embodiments are merely examples. It goes without saying that they are not confined to the depicted embodiments. While various features have been described in conjunction with the examples outlined above, various alternatives, modifications, variations, and/or improvements of those features and/or examples may be possible. Accordingly, the examples, as set forth above, are intended to be illustrative. Various changes may be made without departing from the broad spirit and scope of the underlying principles.

What is claimed is:

1. A non-transitory computer-readable medium storing computer-readable instructions that, when executed by a processor of a communication device, instruct the processor to perform processes comprising:

performing a first receiving that receives a start request from a partner communication device, the partner communication device being another communication device, the start request including identification information and first user information and requesting that a remote conference be started, the identification information identifying a user of the partner communication device, and the first user information being user information that pertains to the user identified by the identification information;

acquiring, based on the identification information, second user information stored in a storage portion, the second user information being user information that pertains to the user identified by the identification information included in the start request;

performing a first determining that determines, based on a comparison of the first user information and the second user information, whether the first user information and the second user information differ from one another;

performing a first outputting that outputs a first command in response to determining, in the first determining, that the first user information and the second user information differ from one another, the first command being a

command to provide notification of the first user information and the second user information; and

performing a second outputting that outputs a second command in response to determining, in the first determining, that the first user information and the second user information do not differ from one another, the second command being a command to provide notification of one of the first user information and the second user information.

2. The non-transitory computer-readable medium according to claim **1**, wherein

the first outputting comprises outputting a third command to a display portion of the communication device in response to determining, in the first determining, that the first user information and the second user information differ from one another, the third command being a command to display the first user information along with the second user information.

3. The non-transitory computer-readable medium according to claim **1**, wherein

the acquiring comprises:

performing a second determining that determines, based on the identification information, whether the second user information is stored in the storage portion, the storage portion being included in the communication device; and

reading the second user information from the storage portion in response to determining, in the second determining, that the second user information is stored in the storage portion.

4. The non-transitory computer-readable medium according to claim **3**, wherein the computer-readable instructions further instruct the processor to perform a process comprising:

storing the first user information, in association with the identification information, as the second user information in the storage portion, the first user information being included in the start request that was received in the first receiving.

5. The non-transitory computer-readable medium according to claim **3**, wherein

the computer-readable instructions further instruct the processor to perform a process comprising:

performing a third determining that determines whether permission information is included in the start request that was received in the first receiving, the permission information indicating that displaying the second user information is permitted, and

the first outputting outputs a forth command without outputting a fifth command, in response to determining, in the second determining, that the second user information is stored in the storage portion and determining, in the third determining, that the permission information is not included in the start request, even in a case where it has been determined, in the first determining, that the first user information and the second user information differ from one another, the forth command being a command to provide notification of the first user information and update information, the update information being information that indicates that the first user information and the second user information differ from one another, and the fifth command being a command to provide notification of the second user information.

6. The non-transitory computer-readable medium according to claim **1**, wherein

the computer-readable instructions further instruct the processor to perform processes comprising:

performing a second receiving that receives a member list, the member list including identification information that identifies a user of at least one other communication device; and

performing a fourth determining that determines whether the identification information that is included in the start request is included in the member list, wherein

the first outputting outputs the first command in response to determining, in the first determining, that the first user information and the second user information differ from one another and determining, in the fourth determining, that the identification information that is included in the start request is included in the member list, and wherein

the first outputting outputs a fourth command without outputting a fifth command, in response to determining, in the fourth determining, that the identification information that is included in the start request is not included in the member list, even in a case where it has been determined, in the first determining, that the first user information and the second user information differ from one another, the fourth command being a command to provide notification of the first user information and update information, the update information being information that indicates that the first user information and the second user information differ from one another, and the fifth command being a command to provide notification of the second user information.

7. The non-transitory computer-readable medium according to claim **1**, wherein

the first receiving comprises receiving the start request that includes the first user information, the first user information further including affiliation information that indicates an affiliation of the user of the partner communication device,

the computer-readable instructions further instruct the processor to perform a process comprising:

performing a fifth determining that determines whether first affiliation information and second affiliation information match, the first affiliation information being affiliation information that is included in user information corresponding to identification information for a user of the communication device, and the second affiliation information being the affiliation information that is included in the first user information,

the first outputting outputs the first command in response to determining, in the first determining, that the first user information and the second user information differ from one another and determining, in the fifth determining, that the first affiliation information and the second affiliation information match, and

the first outputting outputs a fourth command without outputting a fifth command, in response to determining, in the fifth determining, that the first affiliation information and the second affiliation information do not match, even in a case where it has been determined, in the first determining, that the first user information and the second user information differ from one another, the fourth command being a command to provide notification of the first user information and update information, the update information being information that indicates that the first user information and the second user information differ from one another, and the fifth command being a command to provide notification of the second user information.

8. The non-transitory computer-readable medium according to claim 1, wherein

the first receiving comprises receiving the start request that includes the first user information, the first user information further including an indicator that indicates a frequency of remote conferencing, and

the computer-readable instructions further instruct the processor to perform a process comprising:

performing a sixth determining that determines whether the frequency that is indicated by the indicator included in the first user information is greater than a reference frequency,

the first outputting outputs the first command in response to determining, in the first determining, that the first user information and the second user information differ from one another and determining, in the sixth determining, that the frequency that is indicated by the indicator is greater than the reference frequency, and

the first outputting outputs a fourth command without outputting a fifth command, in response to determining, in the sixth determining, that the frequency that is indicated by the indicator is not greater than the reference frequency, even in a case where it has been determined, in the first determining, that the first user information and the second user information differ from one another, the fourth command being a command to provide notification of the first user information and update information, the update information being information that indicates that the first user information and the second user information differ from one another, and the fifth command being a command to provide notification of the second user information.

9. A non-transitory computer-readable medium storing computer-readable instructions that, when executed by a processor of a communication device, instruct the processor to perform processes comprising:

receiving a start request from a server, the start request including identification information and first user information and requesting that a remote conference be started, the identification information identifying a user of a partner communication device, and the first user information being user information that pertains to the user identified by the identification information;

determining, based on the identification information included in the start request, whether second user information is stored in a storage portion of the communication device, the second user information being user information that pertains to the user identified by the identification information;

acquiring the second user information from the storage portion in response to determining that the second user information is stored in the storage portion; and

outputting:

a first display command to a display portion of the communication device in response to determining that the second user information is stored in the storage portion, the first display command being a command to display the first user information and the second user information; and

a second display command to the display portion in response to determining that the second user information is not stored in the storage portion, the second display command being a command to display the first user information.

10. A communication device comprising:

a processor; and

a memory storing computer-readable instructions, wherein the computer-readable instructions cause the processor to perform processes comprising:

receiving a start request from a partner communication device, the start request including identification information and first user information and requesting that a remote conference be started, the identification information identifying a user of the partner communication device, and the first user information being user information that pertains to the user identified by the identification information;

acquiring, based on the identification information, second user information that is stored in a storage portion of the communication device, the second user information being user information that pertains to the user identified by the identification information included in the start request;

determining, based on a comparison of the first user information and the second user information, whether the first user information and the second user information differ from one another;

outputting a first command to a display portion of the communication device in response to determining that the first user information and the second user information differ from one another, the first command being a command to display the first user information and the second user information; and

outputting a second command to the display portion in response to determining that the first user information and the second user information do not differ from one another, the second command being a command to display one of the first user information and the second user information.

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